CHATTAHOOCHEE–OCONEE NATIONAL FOREST

OCONEE R. D.
Beaverdam Road
F. S. 1068
Traffic Service Level C

Reconstruct 3.0 mile

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D.W. Boyd — 7/3/2012
FOREST ENGINEER – ROADS — DATE

7/3/2012
ER STAFF OFFICER — DATE

Jeffrey McDonald
DISTRICT RANGER Acting For — DATE 7/6/2012
Benjamin L Battle

7/9/2012
FOREST SUPERVISOR (for) — DATE

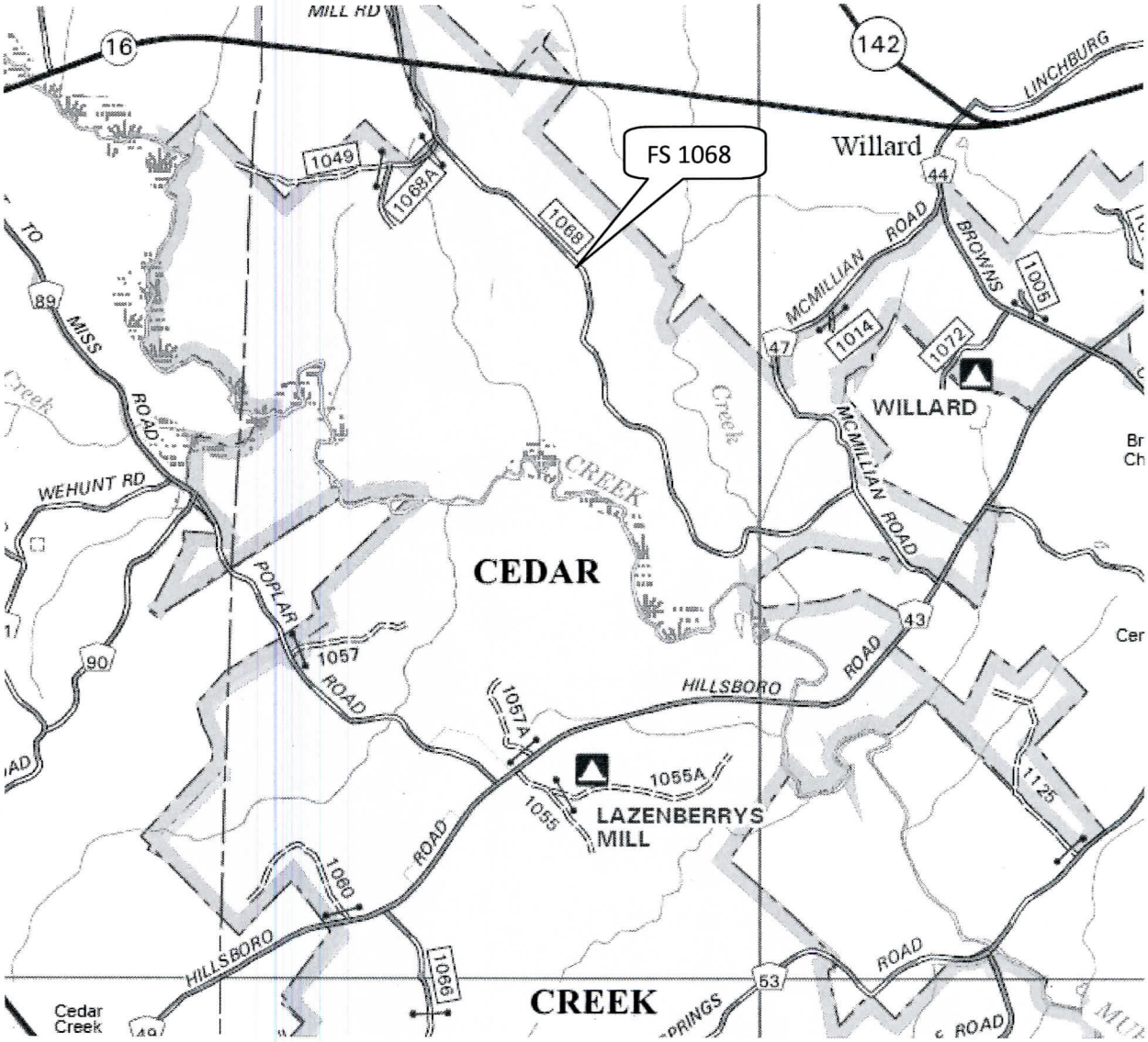
CHATTAHOOCHEE – OCONEE NATIONAL FOREST

OCONEE RANGER DISTRICT

BEAVERDAM 1 TIMBER SALE

BEAVERDAM ROAD

FS 1068



Forest Service
Specified Road Reconstruction

Beaverdam Road

F.S. Road 1068

00+00	Begin project in accordance with typical sections and FS Specifications. Begin at intersection with State Hwy 16. Begin 2" #4 stone.
0+25	Replace stop sign and post
1+50	Replace exiting gate
5+45	Existing culvert "Do Not Disturb" Clean inlet and outlet
16+65	Existing culvert "Do Not Disturb" Clean inlet and outlet
20+30	1068-A intersection right. Maintain smooth transition
29+95	Existing culvert "Do Not Disturb" Clean inlet and outlet.
42+60	Existing culvert "Do Not Disturb" Clean inlet and outlet.
53+30	Existing culvert "Do Not Disturb" Clean inlet and outlet.
61+75	Existing culvert "Do Not Disturb" Clean inlet and outlet.
117+93	Existing culvert "Do Not Disturb" Clean inlet and outlet.
156+80	Stop stone and End of Project

GENERAL NOTES

1. The basic road width for the reconstruction of this road is 12 feet. Basic ROW clearing is 24 feet. All debrie old and new will be scattered outside of clearing limits/tree line.
2. Culvert cleaning will be incidental work included under road reconstruction.
3. Hazard trees will be marked prior to reconstruction.
4. All disturbed soils shall be seeded and mulched. Mulch will not be required where aggregate is placed.
5. Wing ditches will be constructed as needed to provide proper drainage.
6. Drop acceptance of 303.09 to refer to 204.11.
7. Drop acceptance of 251 and refer to description of work.

PART I – SUMMARY OF QUANTITIES

SCHEDULE OF ITEMS

SECTION B – SERVICES AND PRICES

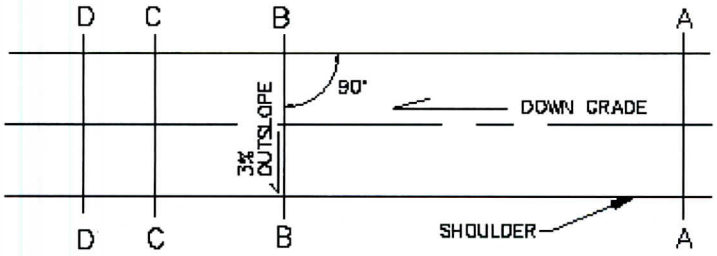
(RECONSTRUCTION F.S. 1068)

Oconee
Chatt-Oconee
Putnam

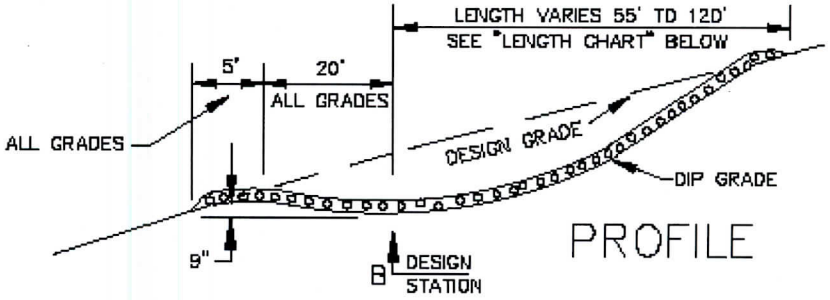
B- 1 - SCHEDULE OF ITEMS

ITEM NO.	DESCRIPTION	PAY UNIT	EST. QTY.	UNIT PRICE	TOTAL PRICE
20208	Removal of individual trees, disposal of tops and limbs_f__(Hazard Trees)	Lump Sum	3.0		
30322	Road reconditioning, roadbed, compaction method _d	Mile	3.0		
30802	Roadway aggregate, compaction method __GA #4 compaction_d___	Ton	1200		
65001	Furnish and install road closure device 18'	Each	1		
63301	Sign system	Each	1		

B-2 - NOTE: Payment for bond premiums in accordance with Clause 52.232-5, Payments under Fixed-Price Construction Contracts, shall not be in addition to the contract price. Include bond payments under 151.01 Mobilization.
Payment will be made on actual work performed as described in FP-03 109.01 unless otherwise noted.



PLAN



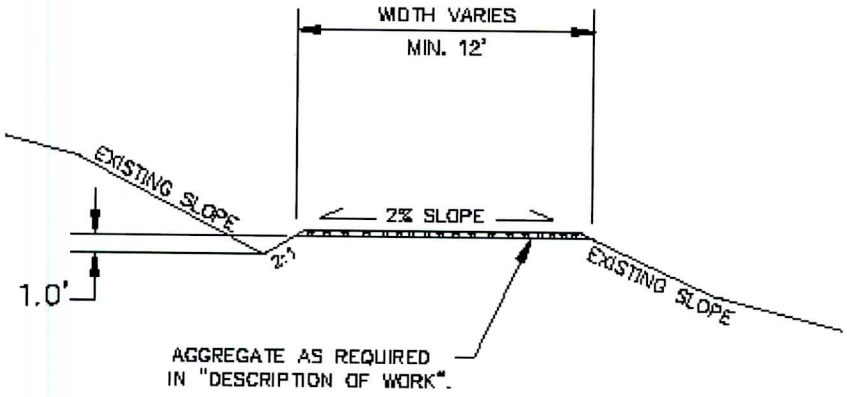
PROFILE

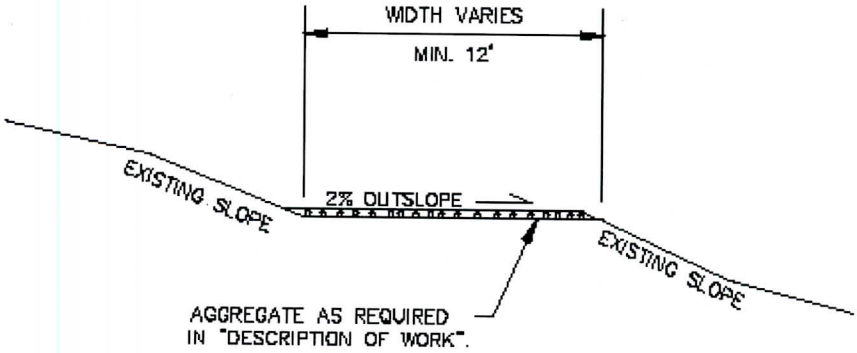
LEGEND	LENGTH CHART	
A = BEGIN THE DIP	DESIGN GRADE	LENGTH
B = LOWEST POINT IN DIP, -=DESIGN STA.=-	10%	120'
C = CREST	9%	80'
D = END OF DIP	8% OR LESS	55'

NOTES: OUTLET OF DIPS SHALL DRAIN FREELY.

NOT TO SCALE

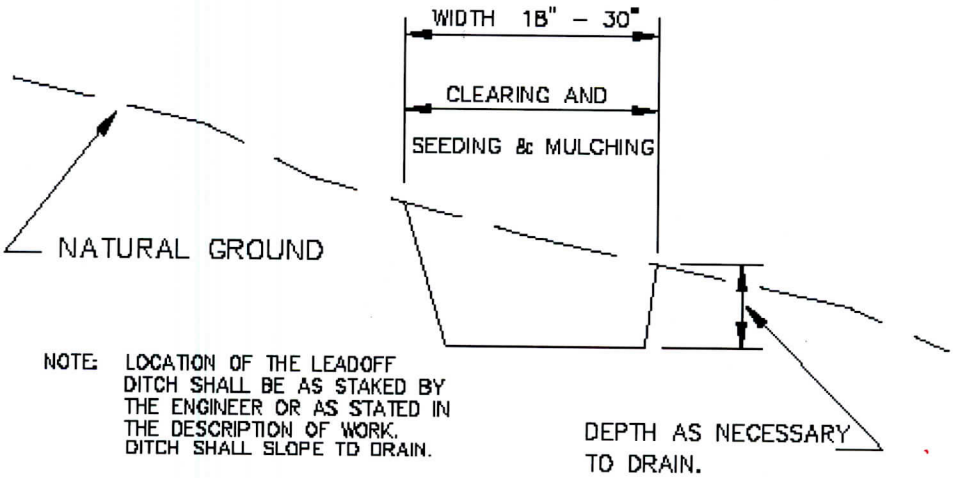
PROJECT: Forest Service Road
LOCATION: OCONEE
FOREST: CHATTAHOOCHEE-OCONEE NFS

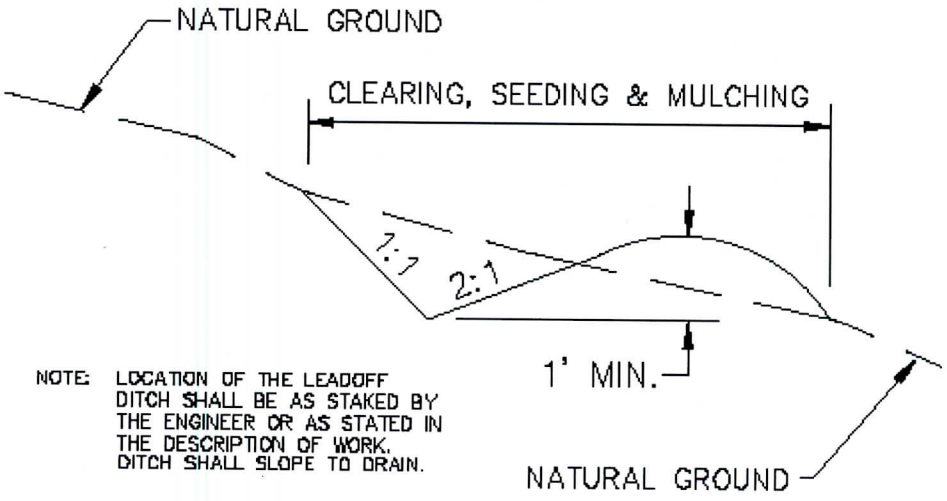




NOT TO SCALE

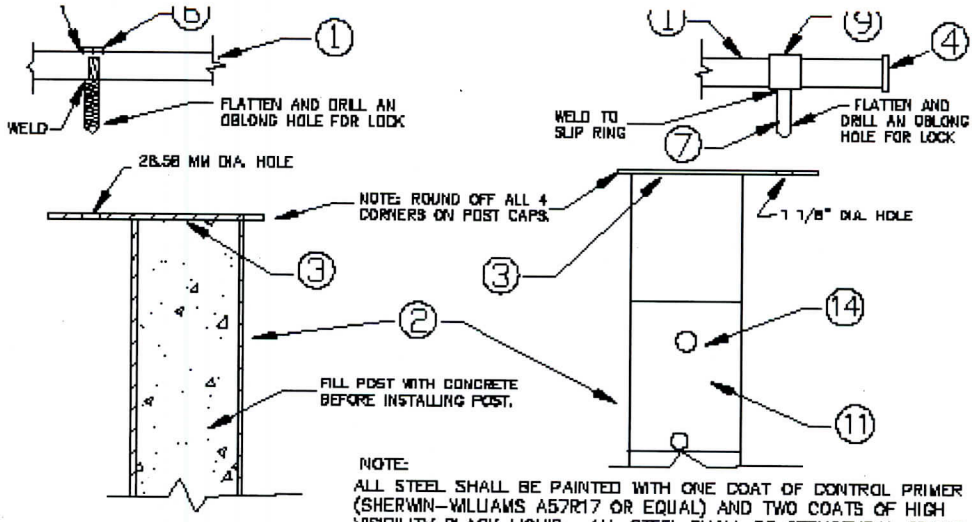
PROJECT: OCONEE ROADS
LOCATION: OCONEE NF
FOREST: CHATTAHOOCHEE-OCONEE NFS



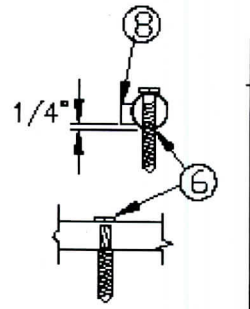


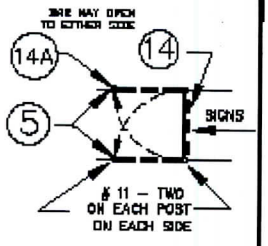
NOT TO SCALE

PROJECT:	Oconee Roads		
LOCATION:	OCONEE NF		
FOREST:	CHATTAHOOCHEE-OCONEE NFS		



NOTE:
ALL STEEL SHALL BE PAINTED WITH ONE COAT OF CONTROL PRIMER (SHERWIN–WILLIAMS A57R17 OR EQUAL) AND TWO COATS OF HIGH VISIBILITY BLACK LIQUID. ALL STEEL SHALL BE STRUCTURAL GRADE, SCHEDULE 40 UNLESS OTHERWISE APPROVED BY THE ENGINEER.





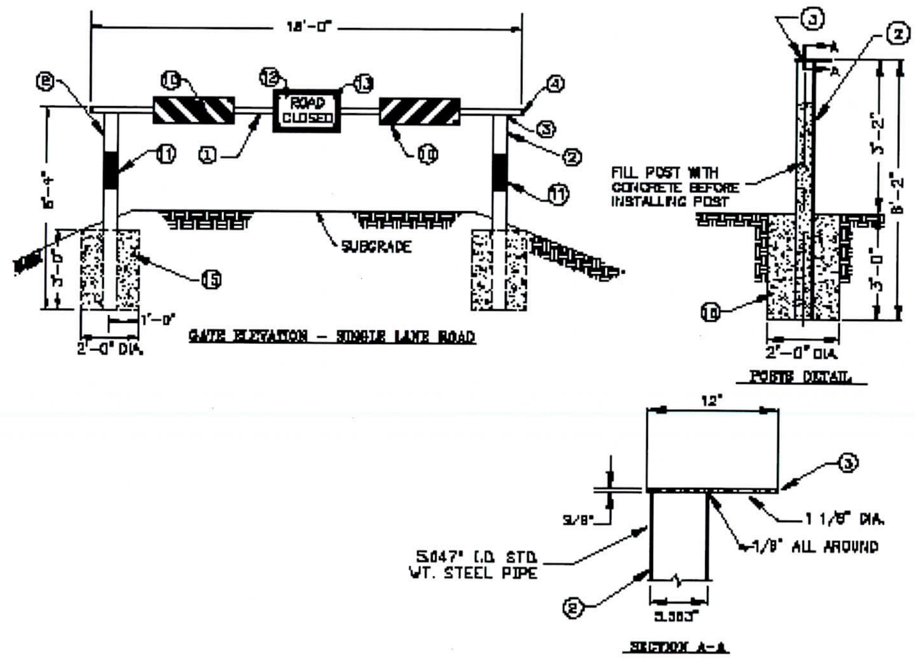
NO.	NAME	DESCRIPTION	QTY
1	GATE BAR	2" DIA. x 216" STEEL PIPE	1
2	GATE POST	5.047" DIA. x 60" STEEL PIPE	2
3	POST CAP	3/8" X 7 1/2 " X 12" PLATE	2
4	GATE BAR CAP	3/8" X 2 1/2" DIA. PLATE	2
5	V NOTCHED TREATED POST, BURIED 0.61M	4" X 4" x VARIES	2
6	HEX BOLT	1" X 3 1/2"	1
7	STEEL PEN	1" DIA. X 1 1/2"	1
8	WELDED STEEL PLATE	1" X 1" X 1/4"	1
9	SLIP RING	2 1/8" I.D. X 3" PIPE	1
10	0.61 M X 20.32 C	BM–L–R BM–R–R	1 1
11	OBJECT MARKER 0.15 M X 0.31 M	OM–2–B	8
12	ROAD CLOSED SIGN, 0.61 M X 0.31 M	FR11–2–24	1
13	SIGN FASTENER, POP RIVETS OR BOLT DEFORM THREADS	3/16"	12
14	ROUND HEAD BOLTS W/NUTS AND WASHERS,	3/16" x 1"	8
14A	WOOD SCREWS	3/16" X 1"	8
●15	CONCRETE FOR POST	CUBIC YARD	.77

DENOTES FILLET WELD, WELD ALL AROUND

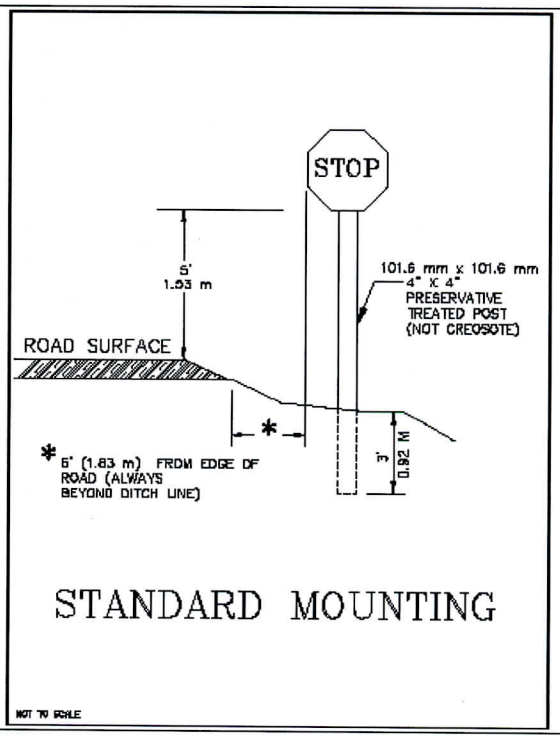
●ALL CONCRETE SHALL MEET REQUIREMENTS OF ITEM 601.

NOT TO SCALE

PROJECT: OCONEE ROADS
LOCATION: OCONEE NF
FOREST: CHATTAHOOCHEE-OCONEE NF


18'-0"
ROAD
CLOSED
5'-4"
3'-0"
1'-0"
2'-0" DIA.
SUBGRADE
GATE ELEVATION – SINGLE LANE ROAD
FILL POST WITH
CONCRETE BEFORE
INSTALLING POST
3'-2"
8'-2"
3'-0"
2'-0" DIA.
POSTS DETAIL
12"
3/8"
1 1/8" DIA.
1/8" ALL AROUND
5.047" I.D. STD.
WT. STEEL PIPE
5.563"
SECTION A-A

NOT TO SCALE


STOP
5'
1.53 m
101.6 mm x 101.6 mm
4" X 4"
PRESERVATIVE
TREATED POST
(NOT CREOSOTE)
ROAD SURFACE
*
* 6' (1.83 m) FROM EDGE OF
ROAD (ALWAYS
BEYOND DITCH LINE)
3'
0.92 M
STANDARD MOUNTING
NOT TO SCALE

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Preface

Preface_wo_03_15_2004_m

Delete all but the first paragraph and add the following:

The Forest Service, US Department of Agriculture has adopted FP-03 for construction of National Forest System Roads.

101 - Terms, Format, and Definitions

101.00_nat_us_07_25_2005

101.01_nat_us_01_22_2009

101.01 Meaning of Terms

Delete all references to the TAR (Transportation Acquisition Regulations) in the specifications.

101.03_nat_us_06_16_2006

101.03 Abbreviations.

Add the following to (a) Acronyms:

AFPA	American Forest and Paper Association
MSHA	Mine Safety and Health Administration
NIST	National Institute of Standards and Technology
NESC	National Electrical Safety Code
WCLIB	West Coast Lumber Inspection Bureau

. Add the following to (b) SI symbols:

mp	Milepost
ppm	Part Per Million

101.04_nat_us_03_29_2007

101.04 Definitions.

Delete the following definitions and substitute the following:

Bid Schedule--The Schedule of Items.

Bridge--No definition.

Contractor--The individual or legal entity contracting with the Government for performance of prescribed work. In a timber sale contract, the contractor is the "purchaser".

Culvert--No definition.

Right-of-Way--A general term denoting (1) the privilege to pass over land in some particular line (including easement, lease, permit, or license to occupy, use, or traverse public or private lands), or (2) Real property necessary for the project, including roadway, buffer areas, access, and drainage areas.

Add the following:

Adjustment in Contract Price--"Equitable adjustment," as used in the Federal Acquisition Regulations, or "construction cost adjustment," as used in the Timber Sale Contract, as applicable.

Change--"Change" means "change order" as used in the Federal Acquisition Regulations, or "design change" as used in the Timber Sale Contract.

Design Quantity--"Design quantity" is a Forest Service method of measurement from the FS-96 *Forest Service Specifications for the Construction of Roads and Bridges.* Under these FP specifications this term is replaced by the term "Contract Quantities".

Forest Service--The United States of America, acting through the Forest Service, U.S. Department of Agriculture.

Neat Line--A line defining the proposed or specified limits of an excavation or structure.

Pioneer Road--Temporary construction access built along the route of the project.

Purchaser--The individual, partnership, joint venture, or corporation contracting with the Government under the terms of a Timber Sale Contract and acting independently or through agents, employees, or subcontractors.

Protected Streamcourse--A drainage shown on the plans or timber sale area map that requires designated mitigation measures.

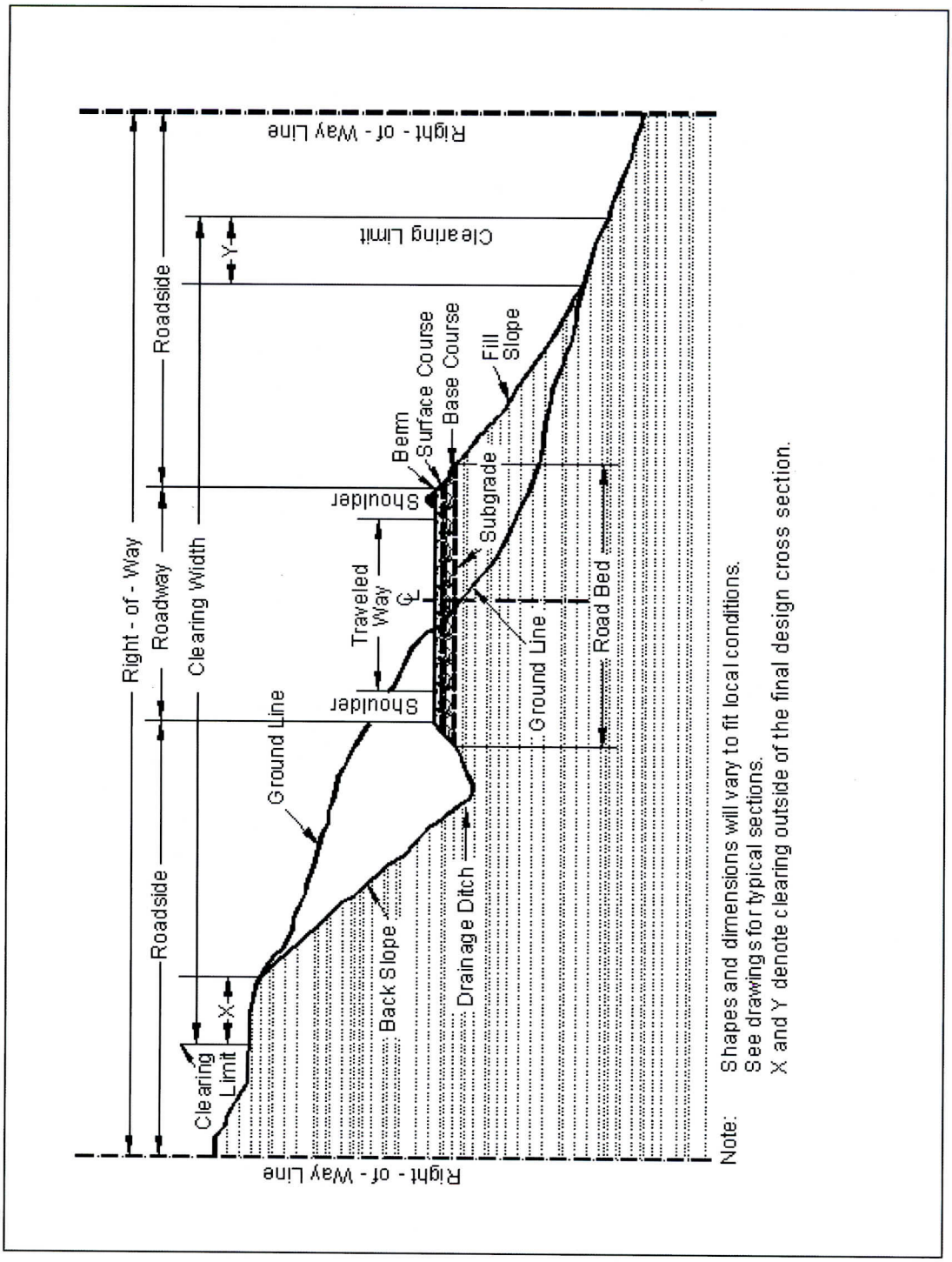
Road Order--An order affecting and controlling traffic on roads under Forest Service jurisdiction. Road Orders are issued by a designated Forest Officer under the authorities of 36 CFR, part 260.

Schedule of Items--A schedule in the contract that contains a listing and description of construction items, quantities, units of measure, unit price, and amount.

Utilization Standards--The minimum size and percent soundness of trees described in the specifications to determine merchantable timber.

Add Figure 101-1—Illustration of road structure terms:

Figure 101-1—Illustration of road structure terms.



101.04 Definitions.
Delete the following definitions:

Contract Modification

Day

Notice to Proceed

Solicitation

102 - Bid, Award, and Execution of Contract

102.00_nat_us_02_16_2005

102 Bid, Award, and Execution of Contract

Delete Section 102 in its entirety.

103 - Scope of Work

103.00_nat_us_02_16_2005

Deletions

Delete all but subsection 103.01 Intent of Contract.

104 - Control of Work

104.00_nat_us_06_16_2006

Deletions

Delete Sections 104.01, 104.02, and 104.04.

104.03_nat_us_01_22_2009

104.03 Specifications and Drawings.

Delete 104.03.

104.06_nat_us_02_17_2005

Add the following subsection:

104.06 Use of Roads by Contractor

The Contractor is authorized to use roads under the jurisdiction of the Forest Service for all activities necessary to complete this contract, subject to the limitations and authorizations designated in the Road Order(s) or described in the contract, when such use will not damage the roads or national forest resources, and when traffic can be accommodated safely.

105 - Control of Material

105.02_nat_us_01_18_2007

105.02 Material Sources.

105.02(a) Government-provided sources.

Add the following:

Comply with the requirements of 30 CFR 56, subparts B and H. Use all suitable material for aggregate regardless of size unless otherwise designated. When required, re-establish vegetation in disturbed areas according to section 625.

105.05_nat_us_05_12_2004

105.05 Use of Material Found in the Work.

Delete 105.05 (a) and (b) and the last sentence of the second paragraph and substitute the following:

Materials produced or processed from Government lands in excess of the quantities required for performance of this contract are the property of the Government. The Government is not obligated to make reimbursement for the cost of producing these materials.

106 - Acceptance of Work

106.01_nat_us_07_31_2007

106.01 Conformity with Contract Requirements.

Delete Subsection 106.01 and substitute the following:

References to standard test methods of AASHTO, ASTM, GSA, and other recognized standard authorities refer to the methods in effect on the date of solicitation for bids.

Perform all work to the lines, grades, cross-sections, dimensions, and processes or material requirements shown on the plans or specified in the contract.

Incorporate manufactured materials into the work according to the manufacturer's recommendations or to these specifications, whichever is more strict.

Plan dimensions and contract specification values are the values to be strived for and complied with as the design values from which any deviations are allowed. Perform work and provide material that is uniform in character and reasonably close to the prescribed value or within the specified tolerance range. The purpose of a tolerance range is to accommodate occasional minor variations from the median zone that are unavoidable for practical reasons.

When standard manufactured items are specified (such as fence, wire, plates, rolled shapes, pipe conduits, etc., that are identified by gauge, unit mass, section dimensions, etc.), the identification will be considered to be nominal masses or dimensions. Unless specific contract tolerances are noted, established manufacturing tolerances will be accepted.

The Government may inspect, sample, or test all work at any time before final acceptance of the project. When the Government tests work, copies of test reports are furnished to the Contractor upon request. Government tests may or may not be performed at the work site. If Contractor testing and inspection is verified by the Government, the Contractor's results may be used by the Government to evaluate work for acceptance. Do not rely on the availability of Government test results for process control.

Acceptable work conforming to the contract will be paid for at the contract unit bid price. Four methods of determining conformity and accepting work are described in Subsections 106.02 to 106.05 inclusive. The primary method of acceptance is specified in each Section of work. However, work may be rejected at any time it is found by any of the methods not to comply with the contract.

Remove and replace work that does not conform to the contract, or to prevailing industry standards where no specific contract requirements are noted, at no cost to the Government.

(a) Disputing Government test results. **If the accuracy of Government test results is disputed, promptly inform the CO. If the dispute is unresolved after reasonable steps are taken to resolve the dispute, further evaluation may be obtained by written request. Include a narrative describing the dispute and a proposed resolution protocol that addresses the following:**

(1) Sampling method;

(2) Number of samples;
(3) Sample transport;
(4) Test procedures;
(5) Testing laboratories;
(6) Reporting;
(7) Estimated time and costs; and
(8) Validation process.

If the evaluation requires additional sampling or testing be performed, mutually agree with the Government on witnessing procedures and on sampling and testing by a third party laboratory. Use a third party laboratory accredited by the AASHTO accreditation program. Provide proof of the laboratory's accreditation for the test procedures to be used. Do not use the same laboratory that produced the disputed Government test results or that produced the test results used as a basis for the dispute.

The CO will review the proposed resolution protocol and may modify it before final approval and execution.

The Government will use the approved resolution protocol test results to determine the validity of the disputed testing. If the Government test results are validated, the Contractor will be responsible for all costs associated with developing and performing the resolution protocol. If the Government test results are not validated, the Government will be responsible for all costs associated with developing and performing the resolution protocol. If the validity of the Government test results cannot be determined, the Contractor and Government will equally share all costs associated with developing and carrying out the resolution protocol.

(b) Alternatives to removing and replacing non-conforming work. As an alternative to removal and replacement, the Contractor may submit a written request to:

(1) Have the work accepted at a reduced price; or

(2) Be given permission to perform corrective measures to bring the work into conformity.

The request must contain supporting rationale and documentation. Include references or data justifying the proposal based on an evaluation of test results, effect on service life, value of material or work, quality, aesthetics, and other tangible engineering basis. The CO will determine disposition of the nonconforming work.

106.07 Delete

Delete subsection 106.07.

107 - Legal Relations and Responsibility to the Public

107.05_nat_us_05_11_2004

107.05 Responsibility for Damage Claims.

Delete the entire subsection.

107.06_nat_us_06_16_2006

107.06 Contractor's Responsibility for Work.

Delete the following from the first paragraph.

"except as provided in Subsection 106.07".

07.08_nat_us_03_29_2005

107.08 Sanitation, Health, and Safety

Delete the entire subsection.

107.09_nat_us_06_16_2006

107.09 Legal Relationship of the Parties.

Delete the entire subsection.

107.10_nat_us_06_16_2006

107.10 Environmental Protection.

Add the following:

Design and locate equipment repair shops, stationary refueling sites, or other facilities to minimize the potential and impacts of hazardous material spills on Government land.

Before beginning any work, submit a Hazardous Spill Plan. List actions to be taken in the event of a spill. Incorporate preventive measures to be taken, such as the location of mobile refueling facilities, storage and handling of hazardous materials, and similar information. Immediately notify the CO of all hazardous material spills. Provide a written narrative report form no later than 24 hours after the initial report and include the following:

- Description of the item spilled (including identity, quantity, manifest number, and other identifying information).
- Whether amount spilled is EPA or state reportable, and if so whether it was reported, and to whom.
- Exact time and location of spill including a description of the area involved.
- Containment procedures.
- Summary of any communications the Contractor had with news media, Federal, state and local regulatory agencies and officials, or Forest Service officials.

- Description of clean-up procedures employed or to be employed at the site including final disposition and disposal location of spill residue.

When available provide copies of all spill related clean up and closure documentation and correspondence from regulatory agencies.

The Contractor is solely responsible for all spills or leaks that occur during the performance of this contract. Clean up spills or leaks to the satisfaction of the CO and in a manner that complies with Federal, state, and local laws and regulations.

108 - Prosecution and Progress

108.00_nat_us_02_16_2005

108 Delete.

Delete Section 108 in its entirety.

109 - Measurement and Payment

109.00_nat_us_02_17_2005

109 Deletions

Delete the following entire subsections:

109.06 Pricing of Adjustments.

109.07 Eliminated Work.

109.08 Progress Payments.

109.09 Final Payment.

109.02_nat_us_06_16_2006

109.02 Measurement Terms and Definitions.

(b) Contract quantity.

Add the following:

Contract quantities will be adjusted only when there are errors in the original design of 15% or more.

Change the following:

"(b) Cubic yard" to "(c) Cubic yard".

Add the following definition:

(p) Thousand Board Feet (Mbf). 1,000 board feet based on nominal widths, thickness, and extreme usable length of each piece of lumber or timber actually incorporated in the job. For glued laminated timber, 1,000 board feet based on actual width, thickness, and length of each piece actually incorporated in the job.

155 - Schedules for Construction Contracts

155.00_nat_us_05_11_2004

155 Delete.

Delete Section 155 in its entirety.

203 - Removal of Structures and Obstructions

203.05_nat_us_02_18_2005

203.05 Disposing of Material.

Add the following:

(e) Windrowing Construction Slash. Place construction slash outside the roadway in neat, compacted windrows approximately parallel to and along the toeline of embankment slopes. Do not permit the top of the windrows to extend above subgrade. Use construction equipment to matt down all material in a windrow to form a compact and uniform pile. Construct breaks of at least 15 feet at least every 200 feet in a windrow. Do not place windrows against trees. Obtain approval for pioneer roads. A pioneer road may be constructed to provide an area for placement of windrows, provided the excavated material is kept within the clearing limits and does not adversely affect the road construction.

(f) Scattering. Scatter construction slash outside the clearing limits without damaging trees. Limb all logs. Place logs and stumps away from trees, positioned so they will not roll, and are not on top of one another. Limb and scatter other construction slash to reduce slash concentrations.

(g) Chipping or Grinding. Use an approved chipping machine to grind slash and stumps greater than 3 inches in diameter and longer than 3 feet. Deposit chips or ground woody material on embankment slopes or outside the roadway to a loose depth less than 6 inches. Minor amounts of chips or ground woody material may be permitted within the roadway if they are thoroughly mixed with soil and do not form a layer.

(h) Debris Mat. Use tree limbs, tops, cull logs, split stumps, wood chunks, and other debris to form a mat upon which construction equipment is operated. Place stumps upside down and blend stumps into the mat.

(i) Decking Firewood Material. Remove brush from decks. Limb and deck logs that do not meet Utilization Standards according to Subsection 201.04 as directed by the CO. Cut logs to lengths less than 30 feet. Ensure that logs stacks are stable and free of brush and soil.

(j) Removal to designated locations. Remove construction slash to designated locations.

(k) Piling. Pile construction slash in designated areas. Place and construct piles so that if the piles are burned, the burning will not damage remaining trees. Keep piles free of dirt from stumps. Cut unmerchantable logs into lengths of less than 20 feet.

(l) Placing Slash on Embankment Slopes. Place construction slash on completed embankment slopes to reduce soil erosion. Place construction slash as flat as practicable on the completed slope. Do not place slash closer than 2 feet below subgrade. Priority for use of available slash is for: (1) through fills; (2) insides of curves; and (3) ditch relief outlets.

(m) Hydrological Sensitive Placement. Where required use this method in combination with other designated methods to dispose of material to reduce erosion and to aid in re-vegetation:

1. Place windrow segments on contours, wrap in type I geotextile.
2. Place logs as log erosion barriers on contours. Place logs so that 80% of their length is on the ground surface.
3. Scatter slash on bare or disturbed areas within or outside the clearing limits as directed.
4. Scatter chips or ground woody material on bare or disturbed areas within or outside the clearing limits as directed.

Place stumps in swales or on sites to form planting pockets. Place windrow segments on contours, wrap in type I geotextile.

204 - Excavation and Embankment

204.11_nat_us_04_11_2005

204.11 Compaction.

Delete the first paragraph and replace it with the following:

For compaction according to method (a), (b), or (c), use AASHTO T 27 to determine the amount of material retained on a Number. 4 sieve. For compaction methods (d) or (e) no sieve test is required.

Add the following compaction methods:

(d) Layer Placement Method (Hauling and Spreading Equipment). Place material by end dumping to the minimum depth needed for operation of spreading equipment. Level and smooth each embankment layer before placing the next layers. Operate hauling and spreading equipment

uniformly over the full width of each layer. Construct a solid embankment with adequate compaction by working smaller rock and fines in with the larger rocks to fill the voids, and by operating hauling and spreading equipment uniformly over the full width of each layer as the embankment is constructed.

(e) Layer Placement (Roller Compaction) Method. Place material by end dumping to the minimum depth needed for operation of spreading equipment. Adjust the moisture content of the material to obtain a mass that will not visibly deflect under the load of the hauling and spreading equipment. Operate compaction equipment over the full width of each layer until visible deformation of the layer ceases or, in when a sheepsfoot roller is used, the roller "walks out" of the layer. Make at least three complete passes.

251 - Riprap

251.03_nat_us_08_05_2009

Construction Requirements

251.03 General.

Add the following:

Place riprap under or adjacent to structures before placing prefabricated superstructure units or constructing superstructure falsework unless otherwise approved by the CO.

251.08 Measurement.

Add the following:

Payment for excavation and embankment required for placement of riprap is indirectly included in the pay item for riprap.

308 - Minor Crushed Aggregate

308.05_0803_us_03_20_2012

308.05 Compacting and Finishing Crushed Aggregate.

Delete second paragraph and add the following:

(1) Method 1. Compact each layer according to Subsection 204.11. Roll from the sides to the center, parallel to the centerline or the road. Along the curbs, headers, and walls, and all places not accessible to the roller. Compact the material with approved tampers until no more visible displacement, using a minimum of three passes.

625 - Turf Establishment

625.06 Fertilizing

(a) Dry method or (b) Hydraulic method: Add the following

Fertilzer shall be uniformly applied at the rate of 1000 lbs per ac and shall have

A chemical analysis of 10% Nitrogen, 10% Phosphorus, 10% Potassium

625.07 Seeding (a) Dry method

Remove the last sentence "Lightly compact the seedbed within 24 hours after seeding."

625.07 Seeding

Add the following:

Modified from Table 6-A (Seeding Mixtures for Erosion Control Plantings); Georgia Best Management Practices

For all seed mixes, planting depth <1/4 inch. Seeding rates are for broadcast seeding.

Fall Plantings

Source	Species	Seeding Rate lb./acre		Timing Peidmont	Fertilizer Pounds (10-10-10)	Comments
GA BMP	Crimson clover Hairy Vetch Wheat	15 15 60	bulk bulk bulk	Sept. 1 to Feb 15	500	Well drained clayey or loamy soils. Inoculate clover. Tolerates lower soil pH.
GA BMP	Arrowleaf or crimson clover Perennial ryegrass Wheat	15 15 40	bulk bulk bulk	Sept. 1 to Feb 15	500	Well drained sandy or loamy soils. Inoculate clover. **Use annual rye when possible.**
GA BMP	White clover (Dutch or Ladino) Red clover Perennial ryegrass Annual rye Wheat	5 10 15 30 30	bulk bulk bulk bulk bulk	Sept. 1 to Feb. 15	500	Well drained clayey or loamy soils. Perennial clover can persist for several years. Inoculate clover seed. Maintaining pH above 6.0 is critical.

Spring Plantings

GA BMP	Perennial ryegrass Partridge pea	20 2	bulk PLS	Feb. 15 to April 1	500	****For areas with high soil erosion concern.** Low maintenance, reseeding annuals.
GA BMP	Bahiagrass Brown Top Millet	25 25	bulk bulk	April 1 to August 31	500	****For areas with high soil erosion concern.**
Alternative with natives	Spring oats or brown top millet Switchgrass 'Alamo' Big bluestem 'KY ecotype' or 'Kaw' Indiangrass 'Americus' or 'KY ecotype'	30/25 3 4 4	bulk PLS PLS PLS	April 1 to June 15 or dormant season from Dec. 1 thru Feb.	0	Perennial cover with cover crop, seeding depth <1/4"

625.08 Mulching

Add the following:

Mulch shall be applied at the following rates:

Hay or straw @ the rate of 4,000 pounds per acr, wood cellulose @ the rate of 1500 pounds per acre.

718 - Traffic Signing and Marking Material

718.05_nat_us_08_05_2009

718.05 Aluminum Panels

Delete the third paragraph and replace with the following:

Clean, degrease and properly prepare the panels according to methods recommended by the sheeting manufacturer. Conversion coatings will conform to ASTM B-921 or ASTM B-449.